

ABSTRACT

A circuit and method are given, to realize a high voltage comparator, which generates an output signal for follow-up processing in the low-voltage domain. The high-voltage comparison task is essentially replaced by a current comparison, implemented as a combination of a voltage to current transforming stage with a CMOS current comparator circuit, where only very few parts are working in the high voltage domain. Using the intrinsic advantages of that solution the circuit of the invention is manufactured with standard CMOS technology and only four discrete or integrated extended drain MOS components at low cost. This solution reduces the complexity of the circuit and in consequence also power consumption and manufacturing cost.